AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1.- 15. (CANCELLED)

16.(NEW) An information recording apparatus for recording information onto an information recording medium by irradiating the information recording medium with laser light for recording, the information recording medium comprising: (i) recording layers in an order of a first recording layer and a second recording layer from an irradiation side of the laser light; (ii) a management information area in which a ratio information which indicates a ratio between (ii-1) a first recording power of the laser light irradiated in the second recording layer, which is transmitted through an unrecorded area of the first recording layer, and (ii-2) a second recording power of the laser light irradiated in the second recording layer, which is transmitted through a recorded area of the first recording layer, is recorded; and (iii) a recording power management area in which a recording power value information which indicates a value of the first recording power or the second recording power is recorded,

said information recording apparatus comprising:

a reading device for reading the ratio information recorded in the

management information area and the recording power value information recorded in the recording power management area;

a setting device for setting the recording power of the laser light on the basis of the ratio information and the recording power value information read by said reading device; and

an irradiating device for irradiating the second recording layer with the laser light with the recording power set by said setting device.

17.(NEW) The information recording apparatus according to claim 16, wherein

said information recording apparatus further comprises a judging device for judging whether the first recording layer is unrecorded or recorded, and

said setting device sets the recording power, in accordance with a judgment result by said judging device.

18.(NEW) The information recording apparatus according to claim 17, wherein said judging device judges whether or not the first recording layer is unrecorded or recorded, by each predetermined area unit, by collectively scanning recording areas in the first recording layer.

19.(NEW) The information recording apparatus according to claim 17, wherein said judging device judges whether or not the first

recording layer is unrecorded or recorded, by referring to table information which indicates whether or not the another recording layer is unrecorded or recorded, by each predetermined area unit in recording areas in the another recording layer.

20.(NEW) An information recording method of recording information onto an information recording medium by irradiating the information recording medium with laser light for recording, the information recording medium comprising: (i) recording layers in an order of a first recording layer and a second recording layer from an irradiation side of the laser light; (ii) a management information area in which a ratio information which indicates a ratio between (ii-1) a first recording power of the laser light irradiated in the second recording layer, which is transmitted through an unrecorded area of the first recording layer, and (ii-2) a second recording power of the laser light irradiated in the second recording layer, which is transmitted through a recorded area of the first recording layer, is recorded; and (iii) a recording power management area in which a recording power value information which indicates a value of the first recording power or the second recording power is recorded,

said information recording method comprising:

a reading process of reading the ratio information recorded in the management information area and the recording power value information recorded in the recording power management area;

a setting process of setting the recording power of the laser light on the basis of the ratio information and the recording power value information read by said reading process; and

an irradiating process of irradiating the second recording layer with the laser light with the recording power set by said setting process.

21.(NEW) An information recording medium comprising:

recording layers in an order of a first recording layer and a second recording layer from an irradiation side of the laser light, and

a management information area in which a ratio information which indicates a ratio between (ii-1) a first recording power of the laser light irradiated in the second recording layer, which is transmitted through an unrecorded area of the first recording layer, and (ii-2) a second recording power of the laser light irradiated in the second recording layer, which is transmitted through a recorded area of the first recording layer, is recorded.

22.(NEW) The information recording medium according to claim 21, wherein the recording power is pulse intensity.

23.(NEW) The information recording medium according to claim 21, wherein the management information area is in a lead-in area.

24.(NEW) The information recording medium according to claim 21, wherein the ratio information is recorded in advance as pre-format information.